

19990924.ba v02_n678.bam.990924

>From ???@??? Fri Sep 24 15:16:05 1999
Message-Id: <199909241526.d80FQV110972@sco.theporch.com>
Date: Fri, 24 Sep 1999 10:25:43 CDT
From: Old Tube Radios <boatanchors@theporch.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: BOATANCHORS digest 2678

BOATANCHORS Digest 2678

Topics covered in this issue include:

- 1) Re: boatanchor keying
by Bob Roehrig <broehrig@admin.aurora.edu>
- 2) WTB: 51S1
by Andre Guibert <aguibert@sympatico.ca>
- 3) Re: boatanchor keying
by "Arden Allen" <gumbear@pacbell.net>
- 4) RE: boatanchor keying
by "Jim Berry" <basalop@gte.net>
- 5) Re: Chokes/the Great Debate
by "Barry L. Ornitz" <ornitz@tricon.net>
- 6) What does BNC stand for?
by Joe Eide <jeide@execpc.com>
- 7) Re: Chokes/the Great Debate
by "Arden Allen" <gumbear@pacbell.net>
- 8) BNC
by midshires@cix.co.uk (Andrew Emmerson)
- 9) Re: What does BNC stand for?
by "Dan Martin" <dmartin@visuallink.com>
- 10) RE: boatanchor keying
by "James C. Garland" <4cx250b@miavx1.acs.muohio.edu>
- 11) Heathkit AR-3 request
by "James C. Garland" <4cx250b@miavx1.acs.muohio.edu>
- 12) Re: Choke talk
by "David M. Upton" <david@wb1cmg.mv.com>
- 13) Re: BNC
by polepeeg@aa4rm.ba-watch.org (Marty's Refl. Drop)
- 14) Re: Chokes/the Great Debate
by "Roberta J. Barmore" <rbarmore@indy.net>
- 15) Re: HQ-170/170A
by Jderm740@aol.com
- 16) Re: What does BNC stand for?
by wpul1130 <wpul1130@ithink.net>
- 17) RE: boatanchor keying
by Bocci Paul-CPB007 <CPB007@lmpsil02.comm.mot.com>
- 18) Fw: boatanchor keying

by "Spencer Petri" <wa5jci@flash.net>
19) BNC again
by midshires@cix.co.uk (Andrew Emmerson)
20) Unloading@Graylake II
by "Terry O'Laughlin" <terryo@wort-fm.terracom.net>

Date: Thu, 23 Sep 1999 19:31:57 -0500 (CDT)
From: Bob Roehrig <broehrig@admin.aurora.edu>
To: Old Tube Radios <boatanchors@theporch.com>
cc: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: boatanchor keying
Message-ID: <Pine.OSF.3.96.990923192622.2096A-1000000@admin.aurora.edu>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Thu, 23 Sep 1999, Rodger Singley wrote:

> I am leaning towards a reed relay added to the keyer but I am
> interested in what others have been doing.

I always use a relay for keying CW. Both of my keyers have reed relays and my homebrew Hartley has a mercury wetted relay (which is the best way to go). Even using reed relays, you might want to put some resistance in the keying lead. Reeds can lock up due to pitting caused by arcs if there is much reactance in the keying circuit, such as bypass caps. Adding some series resistance will avoid destroying the contacts.

"Nostalgia is a thing of the past"
E-mail: broehrig@admin.aurora.edu or k9eui@arrl.net 73 de Bob, K9EUI
CIS: Data / Telecom Aurora University, Aurora, IL
630-844-4898 Fax 630-844-4222

Date: Thu, 23 Sep 1999 21:38:34 -0400 (EDT)
Message-Id: <1.5.4.16.19990923213049.1cd7c8c0@pop1.sympatico.ca>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
To: Old Tube Radios <boatanchors@theporch.com>
From: Andre Guibert <aguibert@sympatico.ca>
Subject: WTB: 51S1

Bonsoir to All
Looking for above, in working condition and 75 on
cosmetic would do.
Will be in a good home, will even teach it to speak French.
Answer me on Email.

Andre

Andre Guibert
aguibert@sympatico.ca

Message-Id: <199909240135.SAA11783@mail-gw6.pacbell.net>
From: "Arden Allen" <gumbear@pacbell.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: boatanchor keying
Date: Thu, 23 Sep 1999 18:34:55 -0700
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

Roger;

I did a little research at the Digi-Key website. Zetex has several high voltage MOSFET's with drain voltage ratings to 450 volts in their E-line package which is similar to the T0-92 package. You can also get data sheets from Zetex's website which is linked by Digi-Key. Go to.....

<<http://www.digikey.com/DigiKeySearch.html>>

.....and type ZVN4424A into the search field. That's probably the part that will get you keying boatanchors reliably.

Arden Allen KB6NAX Vallejo, CA gumbear@pacbell.net

From: "Jim Berry" <basalop@gte.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: RE: boatanchor keying
Date: Thu, 23 Sep 1999 19:25:45 -0700
Message-ID: <000301bf0634\$1b6604c0\$c6050f3f@default>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hello Rodger and other BA fans,

What I did was put a relay in a little aluminum box that I key with one of my "delicate" keyers. I have several inputs and several outputs all isolated by diodes. That way I can have several keyers hooked up and several transmitters also. Of course I only use one transmitter at a time, but when one is turned on, it gets keyed.

Now for the choice of keying relay: You will be surprised at how fast a rather clunky relay can be keyed. I chose one that had pretty small contacts and rather close spacing from my junk box. Hooked it up and it does not seem to stutter at 30 wpm plus. Much faster than most of my old BA rigs can key anyway. Don't go too light on the relay contacts. I have used sealed reed relays before and stuck the contacts. A reed relay is probably fine for grid block keying, but cathode keying and keying another relay may be just a bit too much current for them.

Noise: A reed relay is usually very quiet, but little rubber grommets can be used to absorb the sound of the relay if the noise is a bother to you.

Don't forget to stick a diode across the coil of the relay to protect the keying transistor.

> curious what sorts of external keying systems BA users are
> employing.
>

Message-Id: <199909240142.VAA04044@flash.naxs.net>
From: "Barry L. Ornitz" <ornitz@tricon.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Chokes/the Great Debate
Date: Thu, 23 Sep 1999 22:37:33 -0400

Thanks Bobbi,

You have done us a service by pointing out the underlying reason for a choke and by noting that all solutions to the problem are compromises. You wrote:

> When you want, oh, let's say "a plate choke for an RF
> amplifier," you're asking for a thing to do a job; but what's
> the *job? That's the *real* question, the one that tells us
> what the thing is.

> And what the "job" is here is that you need a device that
> offers low DC resistance but that at some alternating frequency
> becomes a very high impedance. (And "what's the frequency?"
> [Kenneth?] is the next question). That's all you want. In a
> perfect world, what we need here is 0 Ohms at DC and infinite
> Ohms from, oh, 1 cps through visible light and preferably in a
> small, indestructible package.

Followed later by a key phrase:

>We can dodge our imperfections or we can drown 'em but mostly we
>hedge our bets and try to do both!

Amen! And then you give two examples:

> You *dodge* 'em by picking or designing the choke in such
>wise that in the application, it exhibits no self-resonances at
>or near any frequency we will ever run through the amplifier in
>question.

This is typical of the high-Q preference. It works well at low frequencies, or over a limited band of frequencies, but if the active device has appreciable gain at VHF, even the smallest amount of feedback will be amplified and can cause damaging levels of circulating currents in the choke and destroy it. Think of tubes like 4-1000, 813, 807, etc. that do not amplify much above 100 MHz as being good candidates for this type of choke.

> You *drown* 'em by making such self-resonance broad and not
>very ringy; these are attributes of a low-Q resonant circuit and
>what you're doing is ensuring that, even at resonance, the
>"sneak tank" will take too much energy to get a satisfying
>ring; it acts like it has a lot of series R and stays a bit
>high-impedancy, which is ugly but works.

This is a better approach for devices with a high gain bandwidth product. Like it or not, some VHF and UHF resonances will always be present in any real circuit. With lower Q chokes, and especially with choke construction that causes the Q to drop with increasing frequency, you convert this energy into heat before it can be fed back and amplified. Think of using this type of design for tubes like the 4CX250, 8122, and the 3CX1500/8877.

Which is best? Like Bobbi says, it depends. Design is a compromise. Bobbi sums it up well:

> *Every* choke you *ever* saw is some collection of these
>trade-offs, and like legal contracts or dental work, no two are
>quite the same: different needs and considerations and
>facilities lead to different ways of solving similar problems.
>It's like snowflakes, the underlying paradigm is the same but
>the final result exhibits vast variation.

And especially in this paragraph :

> ...But (and here's the Great Secret) there's no One Right
>Answer, and there's no formula from which to derive one. The
>closer you get to actual stuff you can actually pick up with
>your actual hands, the more the answer veers off into "it
>depends." Understanding *what* it depends on and *why* it
>depends on that is the whole trick to making this stuff work.

Since Arden seems so dead-set that low Q cannot work, I will propose one final thought experiment. Suppose you had to design an amplifier having an active device, tube/transistor/whatever, that produces stable amplification from DC to 1 GHz. What would you use for a DC/LF/MF/HF/VHF/UHF choke? One answer, especially useful for low power, involves going back to Bobbi's original job requirements - a high impedance compared to the operating load impedance of the active device. What is the ultimate low-Q solution? A resistor! Yes it has DC loss; yes it requires the supply voltage to be much higher; yes it dissipates heat. But it does allow you to power the active device and couple energy out of it without having any nasty resonances. Is it a good solution? It depends..., perhaps not for high power, but it is a common technique for MMIC's.

73, Barry WA4VZQ ornitz@tricon.net

Date: Thu, 23 Sep 1999 22:08:45 -0500
From: Joe Eide <jeide@execpc.com>
Subject: What does BNC stand for?
To: Old Tube Radios <boatanchors@theporch.com>
Message-id: <37EAEB3D.2CCFF4BF@execpc.com>
MIME-version: 1.0
Content-type: text/plain; charset=us-ascii
Content-transfer-encoding: 7bit

A friend just asked me what "BNC" stands for. If I knew, I don't remember. Can anyone help?

.. Joe - KB9R

Message-Id: <199909240400.VAA27525@mta3.snfc21.pbi.net>
From: "Arden Allen" <gumbear@pacbell.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Chokes/the Great Debate
Date: Thu, 23 Sep 1999 20:58:50 -0700
MIME-Version: 1.0

Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

> Since Arden seems so dead-set that low Q cannot work, I will
> propose one final thought experiment. Suppose you had to design
> an amplifier having an active device, tube/transistor/whatever,
> that produces stable amplification from DC to 1 GHz. What would
> you use for a DC/LF/MF/HF/VHF/UHF choke? One answer, especially
> useful for low power, involves going back to Bobbi's original job
> requirements - a high impedance compared to the operating load
> impedance of the active device. What is the ultimate low-Q
> solution? A resistor! Yes it has DC loss; yes it requires the
> supply voltage to be much higher; yes it dissipates heat. But it
> does allow you to power the active device and couple energy out
> of it without having any nasty resonances. Is it a good
> solution? It depends..., perhaps not for high power, but it is a
> common technique for MMIC's.

I have a bunch of transmitters that have 6146's for final amplifiers. I love 6146's. They are great and rugged tubes and are capable of good power gain up to about 250MHz. All of the transmitters have parasitic suppressor chokes wound on resistors connected to the plates. Some of the transmitters have single layer, single winding solenoidally wound plate chokes, some have multi-section honeycomb wound plate chokes, and one has a quasi-honeycomb/solenoidally wound choke. None have National's R-175. Just looking at the various chokes tells me that the Q's of the various types of winding vary by a fair amount, particularly if one is considering only the choke's construction by itself, without consideration of the effect on coil Q of the operating amplifier (the dynamic plate impedance shunts the plate choke). Hidden in that array of transmitters lies the secrets of successful transmitter design, whether done by thorough mathematical circuit analysis, by cut-and-try model development, or by whatever method. None of those chokes are wound on ferrite or powdered iron cores. None are wound on resistors or have resistors in parallel with the chokes. None have resistors in series with them on the RF end of the choke. Some of you have experience measuring coil Q's. What range of Q's would these various chokes exhibit on a Q meter or impedance bridge? Would the answer to this question tell us that choke Q varies quite a bit and therefore its significance is suspect???? Or not? What conclusions could we draw from this data? I would like to see a little more practical application data and a little less ivory tower that's-the-way-its-gotta-be-son orthodoxynoids.

Arden Allen KB6NAX Vallejo, CA gumbear@pacbell.net

Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Date: Fri, 24 Sep 1999 11:26 +0100 (BST)
From: midshires@cix.co.uk (Andrew Emmerson)
Subject: BNC
To: Old Tube Radios <boatanchors@theporch.com>
CC: midshires@cix.co.uk
Message-Id: <memo.19990924112635.36979L@midshires.compulink.co.uk>

BNC = Baby (or Bayonet) Neill Concelman. Neill and Concelman were the designers. It appears that the B originally stood for Baby but after the TNC connector came out, the B became B for bayonet, to distinguish it from the threaded (TNC) version.

In case your friend asks a supplementary, here are some more...

C = Concelman. Developed by Carl Concelman of Amphenol.
DIN = Deutsche Industrienormen Ausschuss (German standards-making authority).
EIAJ = Electronics Industry Association of Japan.
MUSA = Multiple Unit Steerable Array. Developed in the 1930s by the British Post Office. It is very similar to the American Western Electric video jack.
N = Neill or Navy type. Originated in 1942 by Paul Neill of Bell Labs and standardised on a Navy Bureau of Ships drawing.
RCA = Radio Corporation of America.
UHF = Ultra High Frequency. Developed in 1940 by E.C. Quackenbush of the American Phenolic Corporation (later Amphenol). At the time this connector was designed, UHF meant what we call VHF today.

73, Andrew Emmerson, G8PTH.

Message-ID: <003c01bf0692\$96f69ec0\$3a4397ce@dmartin>
From: "Dan Martin" <dmartin@visuallink.com>
To: Old Tube Radios <boatanchors@theporch.com>
Cc: "Old Tube Radios" <boatanchors@theporch.com>
Subject: Re: What does BNC stand for?
Date: Fri, 24 Sep 1999 06:41:37 -0700
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Ah, the ol' BNC question! I believe it stands for "Bayonet Neils-Councilman" (sp?) after the type of coupling and the inventors names. I'm not sure about the spelling but I'm pretty sure this is the origin of the term.

Dan

WB4GRA
Winchester, VA

----- Original Message -----

From: Joe Eide <jeide@execpc.com>
To: Old Tube Radios <boatanchors@theporch.com>
Sent: Thursday, September 23, 1999 8:08 PM
Subject: What does BNC stand for?

> A friend just asked me what "BNC" stands for. If I knew, I don't
> remember. Can anyone help?
>
> .. Joe - KB9R

Message-Id: <3.0.5.32.19990924070253.0082c9f0@miavx1.muohio.edu>
Date: Fri, 24 Sep 1999 07:02:53 -0400
To: Old Tube Radios <boatanchors@theporch.com>
From: "James C. Garland" <4cx250b@miavx1.acs.muohio.edu>
Subject: RE: boatanchor keying
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

>
>Don't forget to stick a diode across the coil of the relay to protect
>the keying transistor.
>
Hi Jim and the gang,

The only caveat about putting a diode across the relay coil is that it can significantly lengthen the relay's drop-out time. When the key opens, the diode provides a load for the inductive voltage kick of the relay coil, causing the current in the coil to decay slowly. This decay holds the relay contacts closed for a time equal roughly to R/L , where R is the coil resistance, and L is the coil inductance.

I've done tests of this effect on several vacuum relays (Jennings RF1D, RJ1A, RF3A), which I use for QSK keying in my homebrew amplifiers. Without a diode, the RJ1A drops out in about 2 msec. That time gets lengthened to about 10-15 msec with a diode across the relay coil -- a long enough delay to distort keying waveforms for CW.

Of course, one still needs some kind of voltage clamp across the relay clamp, to avoid zapping the keying transistor. What I've found to be satisfactory is two diodes in series across the relay coil-- an ordinary Si diode, and a zener diode rated at, say, 60 V. The Si diode keeps the zener from conducting when the coil is energized, and the zener clamps the

inductive reverse voltage to 60V when the relay opens. This circuit works well and only slows the release time marginally. The only caveat is to make sure the maximum breakdown voltage of the keying transistor is rated at more than the zener voltage.

73,

Jim Garland W8ZR

Message-Id: <3.0.5.32.19990924071948.00844b80@miavx1.muohio.edu>
Date: Fri, 24 Sep 1999 07:19:48 -0400
To: Old Tube Radios <boatanchors@theporch.com>
From: "James C. Garland" <4cx250b@miavx1.acs.muohio.edu>
Subject: Heathkit AR-3 request
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Hi Gang,

After searching for several years, I've finally obtained my AR-3 novice receiver. The one's I'd seen were usually in poor condition, and it was quite a hunt to find a nice one. It's hard to imagine I actually worked stations using the little radio!

In any case, I'd like to find a circuit diagram for the AR-3. I've checked a couple of Heathkit web sites, but haven't found the diagram. I'd appreciate it if someone would point me to a web site, fax me a diagram [(513) 529-9595], or send one as an email attachment. I can probably figure out the alignment instructions, myself, but if it wasn't a bother, you might include those too.

This radio sort of works, but the BFO doesn't function. I get a loud buzz from the speaker in the CW mode. The wiring is about what you'd expect, considering it was probably assembled by a 12 yr old, using a 100W soldering gun. (At least that's the way mine was assembled).

73,

Jim Garland W8ZR

Message-ID: <37EB7854.75D7@wb1cmg.mv.com>
Date: Fri, 24 Sep 1999 06:10:44 -0700
From: "David M. Upton" <david@wb1cmg.mv.com>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Choke talk

Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

I have been following the discussion of RF chokes in PAs and thought I would sum a few comments into the mix. First, the choke is part of the overall tank circuit if the PA is shunt fed as most of them are. This is true for both HF and VHF although, if you are lucky, you get to ignore it at HF. If the choke has sufficient reactance, say 10x the plate load resistance, then the effects on the overall tuning of the tank are minimal. Most designs work OK with as little reactance as 4x the plate load resistance. Resonances in plate chokes and tube sockets are to be avoided either by design or operation of the amplifier. Parallel resonance in the choke will burn it up by voltage breakdown due to high loaded Q unless damped. Chokes can exhibit parallel and series resonances with different Qs at different frequencies. Making a broadband plate choke for a tube PA is a horrific undertaking that is mostly cut and try...and dip and dip some more. Then install it in place and find some new resonance excited by physical coupling. Calculations have minimal utility in this situation but Ramo and Whinnery's book, "Fields and Waves in Modern Radio" has more understanding of these problems than most newer texts.

David M. Upton, WB1CMG

Date: Fri, 24 Sep 1999 08:38:08 -0400
From: polepeeg@aaa4rm.ba-watch.org (Marty's Refl. Drop)
Message-Id: <199909241238.IAA15670@aaa4rm.ba-watch.org>
To: Old Tube Radios <boatanchors@theporch.com>
Cc: boatanchors@theporch.com
Subject: Re: BNC

Andrew (et al)...

I'd heard another rendition for BNC - "Baby N-connector."

But Andrew, I stand humbled by your presentation

Marty

Date: Fri, 24 Sep 1999 08:28:34 -0500 (EST)
From: "Roberta J. Barmore" <rbarmore@indy.net>
To: Old Tube Radios <boatanchors@theporch.com>
cc: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Chokes/the Great Debate
Message-ID: <Pine.SUN.4.10.9909240754590.2166-100000@indy1>
MIME-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

Hi, Arden!

Ummm, "high" and "low" are compared-to-what words. I'm 5'10" and to me, an awful lot of people are "short." One of the people I work with is 5' standing on tiptoe and *she* finds most people are "tall."

What we are saying when we say "low Q" is likewise relative and modified in another way, too, in that the "Q" of which we are concerned is that of the *self-resonant* *mode* in which both L and C are significant. Okay, okay, normally in a tank circuit it is the losses in the L that do all the Q-mashing, but the C in a choke at self-resonance is lousy C, with none of the attributes that make capacitors nice. (Dielectric heating, anyone? "Slumping" is a typical failure mode for RF chokes and it suggests the beeswax or shellac or whatever has been heated excessively, which takes more than the I-squared-R losses in the wire to really make a fine mess fast).

So, "low" ain't all that low, it's just way lower than, say, what you'd design for the the plate tank of Class C RF amp where the tank spends a *considerable* portion of the waveform ringing like a bell from the one short pulse it gets over (very roughly) 30% of each cycle coincident with a peak.

Attributes of low-Q resonant circuits are wide half-power bandwidth and high damping, the latter indicating not much ringiness when shock-excited. "Not much" is another relative term, of course, and I suspect it is here that a choke designer gets into big fun. (Depending on one's background, tank circuits can usefully be related to filter design and the same rules of behavior apply: the narrower the bandwidth/the steeper the skirts, the more the thing will ring. More folks have been bit this way by erroneous filter design than tank circuits oddies--and at audio, you get to *hear* it, which for me at least tends to give the concept a little more reality).

...I hope that makes a bit of sense. A plate choke in a shunt-fed RF amp is a *nasty* application, since we need the choke to present an impedance at the frequencies of interest significantly greater than that at the point to which it is connected and the plate of a tube typically isn't a low-Z point by any stretch of the word "low." Thus the demands upon the choke in such an application are quite challenging--and small wonder the subject is contentious.

73,

--Bobbi

KB9GKX "RJ" rbarmore@indy.net Roberta J. (Bobbi) Barmore
FISTS #3388 * G-QRP #10001 * ARRL * RSGB * WIA

Appreciator Of Vacuum-Tube Ham Gear and Vintage Keys

From: Jderm740@aol.com
Message-ID: <da636e19.251cdbd3@aol.com>
Date: Fri, 24 Sep 1999 09:51:15 EDT
Subject: Re: HQ-170/170A
To: Old Tube Radios <boatanchors@theporch.com>
CC: boatanchors@theporch.com
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

Hi Clare

I saw your request about the dial calibration adjuster. If your manual (if you have have one) doesn't have a schematic of the adjuster, let me know. I can mail you a copy that shows the set-up of assembly.

About the difference between the two, the 170/180 is standard power supply with rectifier tube. And when you turn the set off, it's off. In the 170A/180A the rectifier is solid state and the filaments of the first osc/mixer and the second osc are ON all the time the set is plugged in. As someone else said, "they are as steady as a rock".
The tubes in question are V2 and V12, 6BE6 and 6C4. the back panel of the chassis is different. The 'A' s have more connectors for interconnections to other devices.

Jack McDermott Jderm740@aol.com

Message-ID: <37EB209E.966F86C1@ithink.net>
Date: Fri, 24 Sep 1999 06:56:30 +0000
From: wpul1130 <wpul1130@ithink.net>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: What does BNC stand for?
Content-Type: text/plain; charset=iso-8859-1
Content-Transfer-Encoding: 8bit

Greetings: I have been told that it stands for "British Naval Connector"
I am not sure, was told this by an ex navy chief.
Lloyd

Dan Martin wrote:

>

> Ah, the ol' BNC question! I believe it stands for "Bayonet Neils-Councilman"

> (sp?)after the type of coupling and the inventors names. I'm not sure about
> the spelling but I'm pretty sure this is the origin of the term.

>

> Dan

> WB4GRA

> Winchester, VA

>

> ----- Original Message -----

> From: Joe Eide <jeide@execpc.com>

> To: Old Tube Radios <boatanchors@theporch.com>

> Sent: Thursday, September 23, 1999 8:08 PM

> Subject: What does BNC stand for?

>

> > A friend just asked me what "BNC" stands for. If I knew, I don't

> > remember. Can anyone help?

> >

> > .. Joe - KB9R

--

~WPC,

Message-ID: <B79009C85505D211B11100805FA784C8032FB81E@s-1l02-k.comm.mot.com>

From: Bocci Paul-CPB007 <CPB007@lmpsil02.comm.mot.com>

To: Old Tube Radios <boatanchors@theporch.com>

Subject: RE: boatanchor keying

Date: Fri, 24 Sep 1999 09:47:17 -0500

MIME-Version: 1.0

Content-Type: text/plain

>Perhaps a MOSFET with a higher drain voltage rating will take care
of the

>problem. The VN10KM is rated at 60 volts I believe. The common
IRF740 is

>good for 400 volts. Take a look in the Digi-Key catalog.

>Arden Allen KB6NAX Vallejo, CA gumbear@pacbell.net

I use one of the Motorola T-MOS mosfets for keying, something like
an MTP4N80.(4A, 800V).

Driven by an opto-isolator, it handles positive and negative
voltages with just a polarity reversing switch.

Actually, my ultimate solution is a box with two of these devices in
it, one set up for positive voltage keying, one for negative, with a bunch
of isolation diodes so that I can permanently wire into multiple
transmitters for either keying polarity. Just power up the transmitter I

want to use tonight. Gives me 9 volts at the keying leads so the bugs don't present any hazard. The two 9 volt batteries in the box last their shelf life as long as I don't accidentally leave the shorting bar closed on one of the bugs.

73 es ZUT
Paul, K9NO

Message-ID: <009601bf069d\$9496b4c0\$40271ed1@wa5jci>
From: "Spencer Petri" <wa5jci@flash.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Fw: boatanchor keying
Date: Fri, 24 Sep 1999 10:00:44 -0500
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Greetings,

I use a 12VDC reed relay for keying all my radios. Doesn't matter what you key when you use one, but I had to replace the relay I was using with one that had larger contacts because it stuck while keying the CE100V. A little 24VAC CT transformer, couple of diodes and a cap and you have 12VDC out to the key or bug.

es 73 de Pete WA5JCI EM21

6 meter VUCC # 361
2 meter VUCC # 346

--

>

Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Date: Fri, 24 Sep 1999 16:12 +0100 (BST)
From: midshires@cix.co.uk (Andrew Emmerson)
Subject: BNC again
To: Old Tube Radios <boatanchors@theporch.com>
CC: midshires@cix.co.uk
Message-Id: <memo.19990924161212.36979Y@midshires.compulink.co.uk>

>I have been told that it stands for "British Naval Connector"

Sorry but categorically not. The British Navy may use a few of them now

but historically not. The BNC is American as apple pie (or at least the way you folk make apple pie!). :-)

73,
Andy.

Andrew Emmerson, Midshires Mediatech
tel: 01604-844130, international +44 1604-844130
fax: 01604-821647, international +44 1604-821647

Message-Id: <3.0.5.32.19990924102307.007ba7e0@wort-fm.terracom.net>
Date: Fri, 24 Sep 1999 10:23:07 -0500
To: Old Tube Radios <boatanchors@theporch.com>
From: "Terry O'Laughlin" <terryo@wort-fm.terracom.net>
Subject: Unloading@Graylake II
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

I'm well into packing for the Grayslake swapmeet. So far the trailer has the following items of interest:

Collins R-390, order no. 14214-PH-51-93, serial no. 2343, clean, working and well calibrated when last used, product detector.

Collins R-390, order no. 14214-PH-51-93, serial no. 375, needs cleaning, operating condition unknown.

Johnson Viking II, working, trapezoid display pickups installed, modulator modified with transformer to have grids of 807s driven by external processor/audio amp (no holes mod - great sounding audio in this configuration), with large box of parts from a second Viking II and a VFO powered by Viking II using a Collins T-195 PT0.

AM-912A/TRC 100-250 MHz RF power amplifier, 4CX250 final, with schematic

AM-1180A/GRC 50-100 MHz RF power amplifier, 4CX250 final, with schematic

R-1051 modules: 1 freq std, 4 IF/audio amp

R-390A PT0 - Raytheon, overhauled 1/6/76 at Tobyhanna

R-390A PT0 - Cosmos, serial no. 18301

R-390A IF strip, complete and original, all Collins, all filters, all tubes and regulator, IERC shields

R-390A IF strip, no mech filters, no tubes

R-390A mini BNC jumpers, mini BNC to full BNC adapter cables, cables with mini BNC on one end. large assortment, great for testing and non-invasive mods

ART-13 modulation transformers (2 units, one without label)

Large assortment UTC, Thordarson, Freed, Stancor... power, modulation, filament, and choke. Many new, most in very good condition. Not weird junk, hand picked for usability in BA projects (the ones I'll never get to). All mid to small size - no KW components. A brief sampling:

UTC LS 6T4 Linear Standard audio

UTC 33982 audio out

UTC LS-12 Linear Standard interstage

Stancor A-3845 multi match modulation (P-P 6V6 or 6F6)

Stancor A-3882 25 watt multimatch 500/333/250 ohm to 15/8/4 ohm

McMartin audio amp modules. 4" x 4" x 15" self contained with 110vac supplies. 600 ohm balanced input. approximately 20 watts out to 8 ohms. Great for use with military gear.

UV-849 triode modulator tubes (among others)

Many other BA and vacuum tube related parts and literature too numerous to mention.

Thanks for all the inquiries to my previous post. Sorry I did not reply. I am selling this stuff because I am too busy to deal with the mounds of equipment gathered in my place. I do not have time to deal with shipping. Items for sale only at the swapmeet. The Eddystone and Gonset from my last post were sold to a local buyer who picked up the equipment. See you at the fest.

73 Terry O' WB9GVB

End of BOATANCHORS Digest 2678
